

What Is Claimed Is:

1. A clip applying apparatus comprising:
a handle assembly;
a body portion defining a longitudinal axis and extending distally from the handle assembly; and
a jaw mechanism including first and second jaws configured to receive a clip therebetween, the first jaw being movable in relation to the second jaw between open and closed positions, each jaw being curved upwardly towards its distal end along the longitudinal axis of the body portion, each curved jaw having a radius of curvature “r” of between about 0.5 inch and about 0.9 inch.
2. A clip applying apparatus according to Claim 1, wherein r is about 0.7 inch.
3. A clip applying apparatus according to Claim 1, wherein the handle assembly includes an actuation member, the clip applying apparatus further including a closure member movably positioned within the body portion, the closure member being operably connected to the actuation member and movable from a retracted position to an advanced position in response to movement of the actuation member through an actuation stroke.
4. A clip applying apparatus according to Claim 3, wherein the jaw mechanism includes a body and first and second spaced shank members extending distally from the body, the first and second jaws extending from a distal end of the first and second shank members respectively.

5. A clip applying apparatus according to Claim 4, wherein each of the first and second shank members includes a cam surface, the closure member being movable into engagement with the cam surfaces of the first and second shank members to move the first and second jaws from the open position to the closed position.

6. A clip applying apparatus according to Claim 5, wherein the jaw mechanism is of monolithic construction.

7. A clip applying apparatus according to Claim 1, further including a rotatable knob supported by the handle assembly, the body portion being operably connected to the rotatable knob such that rotation of the rotatable knob in relation to the handle assembly effects rotation of the body portion and the jaw mechanism in relation to the handle assembly about a longitudinal axis of the body portion.

8. A clip applying apparatus according to Claim 3, wherein the actuation member includes a pivotable trigger.

9. A clip applying apparatus according to Claim 1, further including a clip having a pair of legs and a backspan, the clip being configured to be supported between the first and second jaws.

10. A clip applying apparatus according to Claim 9, wherein the clip has a radius of curvature which is substantially the same as the radius of curvature "r" of the first and second jaws.

11. A clip applying apparatus according to Claim 9, wherein the clip is deformable and is deformed as the clip is supplied into the jaws to have a radius of curvature which is substantially the same as radius of curvature "r" of the first and second jaws.

12. A method of accessing and ligating tissue, the method comprising the steps of:

a) providing a clip applying apparatus having a handle assembly, a body portion defining a longitudinal axis and extending distally from the handle assembly and a jaw mechanism including first and second jaws movable in relation to each other between open and closed positions, the first and second jaws being curved upwardly towards the distal end of the jaws along the longitudinal axis of the body portion, each curved jaw having a radius of curvature " r ";

b) positioning the jaws between tissue to be ligated and surrounding tissue;

c) manipulating the jaws to reposition the tissue to be ligated;

d) rotating the jaw mechanism to position the tissue to be ligated between the first and second jaws; and

e) moving the first and second jaws from the open position to the closed position to ligate the tissue to be ligated.

13. A method according to Claim 12, further including the step of:

a) inserting the body portion and jaw mechanism of the clip applying apparatus through a cannula assembly to access the tissue to be ligated.

14. A method according to Claim 12, wherein r is between about 0.5 inch and 0.9 inch.

15. A method according to Claim 13, wherein r is about 0.7 inch.

16. A method according to Claim 12, further including the step of:

f) placing a clip between the jaws prior to moving the jaws from the open position to the closed position and thereby crimping a clip about the tissue to be ligated when the jaws are moved from the open position to the closed position.

17. A surgical clip comprising:

a pair of legs and a backspan interconnecting the pair of legs, the clip defining a longitudinal axis and having a radius of curvature along its longitudinal axis of between about 0.5 inch and about 0.9 inch.

18. A surgical clip according to Claim 17, wherein the radius of curvature is about 0.7 inch.

19. A kit comprising:

a clip applying apparatus including a handle assembly and a body portion defining a longitudinal axis, the kit further including a plurality of jaw mechanisms, each of the plurality of jaw mechanisms including first and second jaws having a predefined radius of curvature, wherein the radius of curvature of the first and second jaws of each of the plurality of jaw mechanisms is different from the radius of curvature of each of the first and second jaws of each of the other of the plurality of jaw mechanisms.